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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor : Naoki MATSUOKA, et al.

Serial No : 09/942,979

Filed : August 30, 2001

Title : PACKET SWITCH

June 10, 2002

Attn: Customer Corrections Division  
Assistant Commissioner for Patents  
Washington, D.C. 20231

**REQUEST FOR CORRECTED FILING RECEIPT**

SIR:

We received the **Filing Receipt** on the above-referenced case, copy enclosed, wherein the PTO incorrectly listed the **FILING DATE** as **AUGUST 31, 2001**. Please change the same to read: **AUGUST 30, 2001**. As we cannot locate the original Express Mail Receipt (EL639693967US), we enclose herewith a delivery record from the United States Postal Service, showing that the application was received in the United States Patent and Trademark Office on August 31, 2001 at 6:50 A.M. The only way the application could be received at the USPTO on August 31, 2001 at 6:50 A.M. is if it was deposited with the USPS on August 30, 2001. Thus, August 30, 2001 is the proper filing date.

We also enclose a copy of the transmittal sheet and the first page of the specification, showing the Express Mail Item Number.

Any fee, due as a result of this paper may be charged on Deposit Account No. 50-1290.

07/26/2002 AKELLEY 00000020 501290 09942979

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Respectfully submitted,

  
\_\_\_\_\_  
Thomas J. Bean

Reg. No. 44,528

Katten Muchin Zavis Rosenman  
575 Madison Avenue 15<sup>th</sup> Floor  
New York, New York 10022-2585  
(212) 940-8800  
Docket No.: FUJG 18.949

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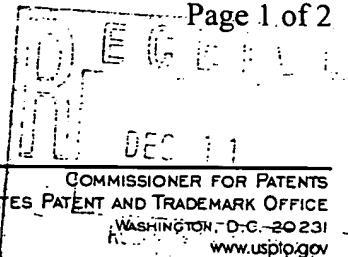
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/942,979	06/31/2001 08/30/2001	2185	870	100794- 11772 (FUJG 18.949	23	12	1

CONFIRMATION NO. 7690

026304  
ROSENMAN & COLIN LLP  
575 MADISON AVENUE  
NEW YORK, NY 10022-2585

UPDATED FILING RECEIPT



\*OC00000007145737\*

Date Mailed: 12/03/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**

Naoki Matsuoka, Kawasaki, JAPAN;  
Hiroshi Tomonaga, Kawasaki, JAPAN;  
Kenichi Kawarai, Kawasaki, JAPAN;  
Masakatsu Nagata, Kawasaki, JAPAN;

**Domestic Priority data as claimed by applicant**

**Foreign Applications**

JAPAN 2000-395741 12/26/2000

If Required, Foreign Filing License Granted 10/15/2001

Projected Publication Date: 06/27/2002

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Non-Publication Request: No

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Early Publication Request: No

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**Title**

Packet switch

Preliminary Class

711

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UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
- Applicant claims small entity status.  
See 37 CFR 1.27.
- Specification [Total Pages 41]  
*(preferred arrangement set forth below)*
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings *(if filed)*
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
- Drawing(s) (35 U.S.C. 113) [Total Sheets 23]
- Oath or Declaration [Total Pages ]
- Newly executed (original or copy)
- Copy from a prior application (37 CFR 1.63 (d))  
*(for continuation/divisional with Box 18 completed)*
- DELETION OF INVENTOR(S)**  
*Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).*
- Application Data Sheet. See 37 CFR 1.76

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation     Divisional     Continuation-in-part (CIP)

of prior application No. \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

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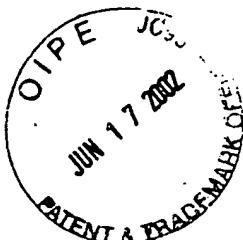
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08/30/01

Filed by Express Mail  
Receipt No. E6203007  
on JUN 17 2002  
pursuant to 37 C.F.R. 1.10.  
by JC



## Title of the Invention

PACKET SWITCH

## BACKGROUND OF THE INVENTION

The present invention relates to a packet switch for outputting packets input through an input line after allocating them to a plurality of output lines.

With an increasing number of Internet users at home and with the remarkable growth of Internet business, an Internet backbone network of a larger capacity and higher quality is strongly demanded. Currently, Internet is mainly operated in best-effort communications without quality guarantee. However, Internet in the future generation is expected to provide realtime data communications using voice, video data, etc. in addition to the best-effort communications.

Therefore, it is necessary for a network node to provide the service quality QoS (Quality of Service) appropriate for various communications services by acquiring a terabit switching capacity with which various types of traffic can be flexibly accommodated. It is considered that the probable means for realizing a node having a terabit switching capacity is an input buffer packet switch capable of performing a process at a high memory access speed.

Various scheduling algorithms have been conventionally suggested for input buffer packet switches. They can be roughly grouped into the following two methods based on the assignment of scheduling functions, that is, a method of distributing and assigning the scheduling functions to interface cards, etc. and a method of assigning the scheduling functions collectively to exclusive cards, etc.

FIGS. 22 and 23 show the distribution of the scheduling functions in the conventional input buffer packet switch. FIG. 22 shows the configuration of the packet switch in which the

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